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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/802,954	03/16/2004	Kevin D. Homer-Richardson	9858-000149/COJ	4195	
. 28997	7590 03/16/2005		EXAM	EXAMINER	
HARNESS, DICKEY, & PIERCE, P.L.C 7700 BONHOMME, STE 400			PASCHALL, MARK H		
	MO 63105	•	ART UNIT	PAPER NUMBER	
ŕ			3742		

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary The MAILING DATE of this communication appear	S SET TO EXPIRE 3 MC a). In no event, however, may a repetition the statutory minimum of thirty apply and will expire SIX (6) MONT use the application to become ABA at e of this communication, even if the	DNTH(S) FROM ply be timely filed (30) days will be considered timely. "HS from the mailing date of this commu	SS		
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Status					
1) Responsive to communication(s) filed on					
/ 	ction is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex	parte Quayle, 1935 C.D.	11, 453 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn 5) Claim(s) is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or of the specification is objected to by the Examiner. 10) The drawing(s) filed on 04 July 2004 is/are: a) Applicant may not request that any objection to the drawing sheet(s) including the correction.	election requirement. accepted or b) objections awing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	1.121(d).		
11) The oath or declaration is objected to by the Exa	miner. Note the attached	Office Action or form PTO-	152.		
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign p a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priorit application from the International Bureau * See the attached detailed Office action for a list of 	have been received. have been received in A y documents have been (PCT Rule 17.2(a)).	pplication No received in this National Sta	age		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-15	52)		

Application/Control Number: 10/802,954

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9 are under 35 U.S.C. 103(a) as being unpatentable over Sanders et al 512' in view of Wo 166'. Sanders et al teach the claimed plasma torch including two gas flows for stabilizing the arc. Though the tip in the instant claims as disclosed could comprise multiple components such as the nozzle and should in Sanders et al, the patent to Wo 166' is applied for showing a single integral tip or swirl unit used to create two gas flows from a single unit. S simpler ;construction is attained. In view of this teaching it would have been obvious to modify the Sanders et al system with a single component tip structure such as shown in Wo 166', to effect a more simple torch construction and manufacture. As per claims 8 and 9, it is considered obvious and

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routine to vary the ratio of flow gas to secondary gas accordingly, such as the ratio defined. This choice would be based on the chosen torch parameters such as the gases used and the materials used and their shapes and thick nesses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark H Paschall whose telephone number is 703 308-1642. The examiner can normally be reached on 7am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans 703 308-2634. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Mark H Paschall Primary Examiner Art Unit 3742

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